

## **RAW SEQUENCE LISTING**

**The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.**

Application Serial Number: 10/774,721B  
Source: IFW/b  
Date Processed by STIC: 5/25/06

# ***ENTERED***



IFW16

## RAW SEQUENCE LISTING

DATE: 05/25/2006

PATENT APPLICATION: US/10/774,721B

TIME: 08:48:36

Input Set : A:\10-774721Sequence Listing.rev.5-18-06.txt

Output Set : N:\CRF4\05252006\J774721B.raw

3 <110> APPLICANT: JOCKERS, Ralf  
 4 COUTURIER, Cyril  
 5 UHLMANN, Eugen  
 7 <120> TITLE OF INVENTION: OB RGRP  
 9 <130> FILE REFERENCE: FRAV2003/0005 US NP  
 11 <140> CURRENT APPLICATION NUMBER: 10/774,721B  
 12 <141> CURRENT FILING DATE: 2004-02-09  
 14 <150> PRIOR APPLICATION NUMBER: 60/461,005  
 15 <151> PRIOR FILING DATE: 2003-04-07  
 17 <150> PRIOR APPLICATION NUMBER: 0301543  
 18 <151> PRIOR FILING DATE: 2003-02-10  
 20 <160> NUMBER OF SEQ ID NOS: 51  
 22 <170> SOFTWARE: PatentIn version 3.1  
 24 <210> SEQ ID NO: 1  
 25 <211> LENGTH: 648  
 26 <212> TYPE: DNA  
 27 <213> ORGANISM: Homo sapiens  
 29 <400> SEQUENCE: 1  
 30 cacttttattc tgattacagt gcattgaatt tcttagaact catactatct gtatacatgt 60  
 32 gcacatgcgg cattttacta tgaaatttaa tatgctgggt tttttaatac ctttatatat 120  
 34 catgttcact ttaagaaaga cttcataagt aggagatgag ttttattctc agcaaataga 180  
 36 cctgtcaaat ttagattatg ttactcaaat tatgttactt gtttggctgt tcatgtagtc 240  
 38 acggtgctct cagaaaatat attaacgcag tcttgtaggc agctgccacc ttatgcagtg 300  
 40 catcgaaacc ttttgcttgg ggatgtgctt ggagaggcag ataacgctga agcaggcctc 360  
 42 tcatgaccca ggaaggccgg ggtggatccc tctttgtgtt gtagtccatg ctattaaaag 420  
 44 tgtggcccac agaccaagag cctcaacatt tcctagagcc ttattagaaa tgcagaatct 480  
 46 gaagcccccac tctggaccca ggacattttg atgagatcca aaggagttgt atgcacatga 540  
 48 aagtttgaga agcatcatca tagagaagta aacatcacac ccaacttcct tatctttcca 600  
 50 gtggctaaac cacttaacct ctctgggtgt tacctgctca tttgttta 648  
 53 <210> SEQ ID NO: 2  
 54 <211> LENGTH: 20  
 55 <212> TYPE: DNA  
 56 <213> ORGANISM: Artificial Sequence  
 58 <220> FEATURE:  
 59 <223> OTHER INFORMATION: AS14  
 61 <220> FEATURE:  
 62 <221> NAME/KEY: misc\_feature  
 63 <223> OTHER INFORMATION: antisens AS14  
 66 <400> SEQUENCE: 2  
 67 aatgccgcat gtgcacatgt 20  
 70 <210> SEQ ID NO: 3  
 71 <211> LENGTH: 396  
 72 <212> TYPE: DNA

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73 <213> ORGANISM: Homo sapiens
75 <220> FEATURE:
76 <221> NAME/KEY: CDS
77 <222> LOCATION: (1)..(396)
80 <400> SEQUENCE: 3
81 atg gcg ggc gtt aaa gct ctc gtg gca tta tcc ttc agt ggg gct att      48
82 Met Ala Gly Val Lys Ala Leu Val Ala Leu Ser Phe Ser Gly Ala Ile
83 1          5          10          15
85 gga ctg act ttt ctt atg ctg gga tgt gcc tta gag gat tat ggc gtt      96
86 Gly Leu Thr Phe Leu Met Leu Gly Cys Ala Leu Glu Asp Tyr Gly Val
87          20          25          30
89 tac tgg ccc tta ttc gtc ctg att ttc cac gcc atc tcc ccc atc ccc      144
90 Tyr Trp Pro Leu Phe Val Leu Ile Phe His Ala Ile Ser Pro Ile Pro
91          35          40          45
93 cat ttc att gcc aaa aga gtc acc tat gac tca gat gca acc agt agt      192
94 His Phe Ile Ala Lys Arg Val Thr Tyr Asp Ser Asp Ala Thr Ser Ser
95          50          55          60
97 gcc tgt cgg gaa ctg gca tat ttc ttc act act gga att gtt gtt tct      240
98 Ala Cys Arg Glu Leu Ala Tyr Phe Phe Thr Thr Gly Ile Val Val Ser
99 65          70          75          80
101 gcc ttt gga ttt cct gtt att ctt gct cgt gtg gct gtg atc aaa tgg      288
102 Ala Phe Gly Phe Pro Val Ile Leu Ala Arg Val Ala Val Ile Lys Trp
103          85          90          95
105 gga gcc tgc ggc ctt gtg ttg gca ggc aat gca gtc att ttc ctt aca      336
106 Gly Ala Cys Gly Leu Val Leu Ala Gly Asn Ala Val Ile Phe Leu Thr
107          100          105          110
109 att caa ggg ttt ttc ctt ata ttt gga aga gga gat gat ttt agc tgg      384
110 Ile Gln Gly Phe Phe Leu Ile Phe Gly Arg Gly Asp Asp Phe Ser Trp
111          115          120          125
113 gag cag tgg tag      396
114 Glu Gln Trp
115          130
118 <210> SEQ ID NO: 4
119 <211> LENGTH: 131
120 <212> TYPE: PRT
121 <213> ORGANISM: Homo sapiens
123 <400> SEQUENCE: 4
125 Met Ala Gly Val Lys Ala Leu Val Ala Leu Ser Phe Ser Gly Ala Ile
126 1          5          10          15
129 Gly Leu Thr Phe Leu Met Leu Gly Cys Ala Leu Glu Asp Tyr Gly Val
130          20          25          30
133 Tyr Trp Pro Leu Phe Val Leu Ile Phe His Ala Ile Ser Pro Ile Pro
134          35          40          45
137 His Phe Ile Ala Lys Arg Val Thr Tyr Asp Ser Asp Ala Thr Ser Ser
138          50          55          60
141 Ala Cys Arg Glu Leu Ala Tyr Phe Phe Thr Thr Gly Ile Val Val Ser
142 65          70          75          80
145 Ala Phe Gly Phe Pro Val Ile Leu Ala Arg Val Ala Val Ile Lys Trp
146          85          90          95

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149 Gly Ala Cys Gly Leu Val Leu Ala Gly Asn Ala Val Ile Phe Leu Thr
150           100           105           110
153 Ile Gln Gly Phe Phe Leu Ile Phe Gly Arg Gly Asp Asp Phe Ser Trp
154           115           120           125
157 Glu Gln Trp
158           130
161 <210> SEQ ID NO: 5
162 <211> LENGTH: 1359
163 <212> TYPE: DNA
164 <213> ORGANISM: Artificial Sequence
166 <220> FEATURE:
167 <223> OTHER INFORMATION: OB RGRP LUC
169 <220> FEATURE:
170 <221> NAME/KEY: misc_feature
171 <223> OTHER INFORMATION: OB RGRP LUC
174 <220> FEATURE:
175 <221> NAME/KEY: CDS
176 <222> LOCATION: (1)..(1359)
179 <400> SEQUENCE: 5
180 atg gcg ggc gtt aaa gct ctc gtg gca tta tcc ttc agt ggg gct att      48
181 Met Ala Gly Val Lys Ala Leu Val Ala Leu Ser Phe Ser Gly Ala Ile
182 1           5           10           15
184 gga ctg act ttt ctt atg ctg gga tgt gcc tta gag gat tat ggc gtt      96
185 Gly Leu Thr Phe Leu Met Leu Gly Cys Ala Leu Glu Asp Tyr Gly Val
186           20           25           30
188 tac tgg ccc tta ttc gtc ctg att ttc cac gcc atc tcc ccc atc ccc      144
189 Tyr Trp Pro Leu Phe Val Leu Ile Phe His Ala Ile Ser Pro Ile Pro
190           35           40           45
192 cat ttc att gcc aaa aga gtc acc tat gac tca gat gca acc agt agt      192
193 His Phe Ile Ala Lys Arg Val Thr Tyr Asp Ser Asp Ala Thr Ser Ser
194           50           55           60
196 gcc tgt cgg gaa ctg gca tat ttc ttc act act gga att gtt gtt tct      240
197 Ala Cys Arg Glu Leu Ala Tyr Phe Phe Thr Thr Gly Ile Val Val Ser
198 65           70           75           80
200 gcc ttt gga ttt cct gtt att ctt gct cgt gtg gct gtg atc aaa tgg      288
201 Ala Phe Gly Phe Pro Val Ile Leu Ala Arg Val Ala Val Ile Lys Trp
202           85           90           95
204 gga gcc tgc ggc ctt gtg ttg gca ggc aat gca gtc att ttc ctt aca      336
205 Gly Ala Cys Gly Leu Val Leu Ala Gly Asn Ala Val Ile Phe Leu Thr
206           100           105           110
208 att caa ggg ttt ttc ctt ata ttt gga aga gga gat gat ttt agc tgg      384
209 Ile Gln Gly Phe Phe Leu Ile Phe Gly Arg Gly Asp Asp Phe Ser Trp
210           115           120           125
212 gag cag tgg att ccg ggg gat cca ccg gct aga gcc acc atg acc agc      432
213 Glu Gln Trp Ile Pro Gly Asp Pro Pro Ala Arg Ala Thr Met Thr Ser
214           130           135           140
216 aag gtg tac gac ccc gag cag agg aag agg atg atc acc ggc ccc cag      480
217 Lys Val Tyr Asp Pro Glu Gln Arg Lys Arg Met Ile Thr Gly Pro Gln
218 145           150           155           160

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## RAW SEQUENCE LISTING

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|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |      |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| 220 | tgg | tgg | gcc | agg | tgc | aag | cag | atg | aac | gtg | ctg | gac | agc | ttc | atc | aac | 528  |
| 221 | Trp | Trp | Ala | Arg | Cys | Lys | Gln | Met | Asn | Val | Leu | Asp | Ser | Phe | Ile | Asn |      |
| 222 |     |     |     | 165 |     |     |     |     |     | 170 |     |     |     | 175 |     |     |      |
| 224 | tac | tac | gac | agc | gag | aag | cac | gcc | gag | aac | gcc | gtg | atc | ttc | ctg | cac | 576  |
| 225 | Tyr | Tyr | Asp | Ser | Glu | Lys | His | Ala | Glu | Asn | Ala | Val | Ile | Phe | Leu | His |      |
| 226 |     |     |     | 180 |     |     |     |     | 185 |     |     |     |     | 190 |     |     |      |
| 228 | ggc | aac | gcc | gct | agc | agc | tac | ctg | tgg | agg | cac | gtg | gtg | ccc | cac | atc | 624  |
| 229 | Gly | Asn | Ala | Ala | Ser | Ser | Tyr | Leu | Trp | Arg | His | Val | Val | Pro | His | Ile |      |
| 230 |     |     | 195 |     |     |     |     | 200 |     |     |     |     | 205 |     |     |     |      |
| 232 | gag | ccc | gtg | gcc | agg | tgc | atc | atc | ccc | gat | ctg | atc | ggc | atg | ggc | aag | 672  |
| 233 | Glu | Pro | Val | Ala | Arg | Cys | Ile | Ile | Pro | Asp | Leu | Ile | Gly | Met | Gly | Lys |      |
| 234 |     | 210 |     |     |     |     | 215 |     |     |     | 220 |     |     |     |     |     |      |
| 236 | agc | ggc | aag | agc | ggc | aac | ggc | agc | tac | agg | ctg | ctg | gac | cac | tac | aag | 720  |
| 237 | Ser | Gly | Lys | Ser | Gly | Asn | Gly | Ser | Tyr | Arg | Leu | Leu | Asp | His | Tyr | Lys |      |
| 238 | 225 |     |     |     | 230 |     |     |     |     | 235 |     |     |     | 240 |     |     |      |
| 240 | tac | ctg | acc | gcc | tgg | ttc | gag | ctc | ctg | aac | ctg | ccc | aag | aag | atc | atc | 768  |
| 241 | Tyr | Leu | Thr | Ala | Trp | Phe | Glu | Leu | Leu | Asn | Leu | Pro | Lys | Lys | Ile | Ile |      |
| 242 |     |     |     | 245 |     |     |     |     | 250 |     |     |     |     | 255 |     |     |      |
| 244 | ttc | gtg | ggc | cac | gac | tgg | ggc | gcc | tgc | ctg | gcc | ttc | cac | tac | agc | tac | 816  |
| 245 | Phe | Val | Gly | His | Asp | Trp | Gly | Ala | Cys | Leu | Ala | Phe | His | Tyr | Ser | Tyr |      |
| 246 |     |     | 260 |     |     |     |     | 265 |     |     |     |     | 270 |     |     |     |      |
| 248 | gag | cac | cag | gac | aag | atc | aag | gcc | atc | gtg | cac | gcc | gag | agc | gtg | gtg | 864  |
| 249 | Glu | His | Gln | Asp | Lys | Ile | Lys | Ala | Ile | Val | His | Ala | Glu | Ser | Val | Val |      |
| 250 |     | 275 |     |     |     |     | 280 |     |     |     |     | 285 |     |     |     |     |      |
| 252 | gac | gtg | atc | gag | agc | tgg | gac | gag | tgg | cca | gac | atc | gag | gag | gac | atc | 912  |
| 253 | Asp | Val | Ile | Glu | Ser | Trp | Asp | Glu | Trp | Pro | Asp | Ile | Glu | Glu | Asp | Ile |      |
| 254 |     | 290 |     |     |     | 295 |     |     |     |     | 300 |     |     |     |     |     |      |
| 256 | gcc | ctg | atc | aag | agc | gag | gag | ggc | gag | aag | atg | gtg | ctg | gag | aac | aac | 960  |
| 257 | Ala | Leu | Ile | Lys | Ser | Glu | Glu | Gly | Glu | Lys | Met | Val | Leu | Glu | Asn | Asn |      |
| 258 | 305 |     |     |     | 310 |     |     |     |     | 315 |     |     |     | 320 |     |     |      |
| 260 | ttc | ttc | gtg | gag | acc | atg | ctg | ccc | agc | aag | atc | atg | aga | aag | ctg | gag | 1008 |
| 261 | Phe | Phe | Val | Glu | Thr | Met | Leu | Pro | Ser | Lys | Ile | Met | Arg | Lys | Leu | Glu |      |
| 262 |     |     |     | 325 |     |     |     |     | 330 |     |     |     |     | 335 |     |     |      |
| 264 | ccc | gag | gag | ttc | gcc | gcc | tac | ctg | gag | ccc | ttc | aag | gag | aag | ggc | gag | 1056 |
| 265 | Pro | Glu | Glu | Phe | Ala | Ala | Tyr | Leu | Glu | Pro | Phe | Lys | Glu | Lys | Gly | Glu |      |
| 266 |     |     | 340 |     |     |     |     | 345 |     |     |     |     | 350 |     |     |     |      |
| 268 | gtg | aga | aga | ccc | acc | ctg | agc | tgg | ccc | aga | gag | atc | ccc | ctg | gtg | aag | 1104 |
| 269 | Val | Arg | Arg | Pro | Thr | Leu | Ser | Trp | Pro | Arg | Glu | Ile | Pro | Leu | Val | Lys |      |
| 270 |     | 355 |     |     |     |     | 360 |     |     |     |     | 365 |     |     |     |     |      |
| 272 | ggc | ggc | aag | ccc | gac | gtg | gtg | cag | atc | gtg | aga | aac | tac | aac | gcc | tac | 1152 |
| 273 | Gly | Gly | Lys | Pro | Asp | Val | Val | Gln | Ile | Val | Arg | Asn | Tyr | Asn | Ala | Tyr |      |
| 274 |     | 370 |     |     |     | 375 |     |     |     |     | 380 |     |     |     |     |     |      |
| 276 | ctg | aga | gcc | agc | gac | gac | ctg | ccc | aag | atg | ttc | atc | gag | agc | gac | ccc | 1200 |
| 277 | Leu | Arg | Ala | Ser | Asp | Asp | Leu | Pro | Lys | Met | Phe | Ile | Glu | Ser | Asp | Pro |      |
| 278 | 385 |     |     |     | 390 |     |     |     |     | 395 |     |     |     | 400 |     |     |      |
| 280 | ggc | ttc | ttc | agc | aac | gcc | atc | gtg | gag | ggc | gcc | aag | aag | ttc | ccc | aac | 1248 |
| 281 | Gly | Phe | Phe | Ser | Asn | Ala | Ile | Val | Glu | Gly | Ala | Lys | Lys | Phe | Pro | Asn |      |
| 282 |     |     |     | 405 |     |     |     | 410 |     |     |     |     | 415 |     |     |     |      |
| 284 | acc | gag | ttc | gtg | aag | gtg | aag | ggc | ctg | cac | ttc | agc | cag | gag | gac | gcc | 1296 |

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```

285 Thr Glu Phe Val Lys Val Lys Gly Leu His Phe Ser Gln Glu Asp Ala
286           420           425           430
288 ccc gac gag atg ggc aag tac atc aag agc ttc gtg gag aga gtg ctg      1344
289 Pro Asp Glu Met Gly Lys Tyr Ile Lys Ser Phe Val Glu Arg Val Leu
290           435           440           445
292 aag aac gag cag taa
293 Lys Asn Glu Gln
294           450
297 <210> SEQ ID NO: 6
298 <211> LENGTH: 452
299 <212> TYPE: PRT
300 <213> ORGANISM: Artificial Sequence
302 <220> FEATURE:
303 <223> OTHER INFORMATION: OB RGRP LUC
305 <220> FEATURE:
306 <221> NAME/KEY: misc_feature
307 <223> OTHER INFORMATION: OB RGRP LUC
309 <400> SEQUENCE: 6
311 Met Ala Gly Val Lys Ala Leu Val Ala Leu Ser Phe Ser Gly Ala Ile
312 1           5           10           15
315 Gly Leu Thr Phe Leu Met Leu Gly Cys Ala Leu Glu Asp Tyr Gly Val
316           20           25           30
319 Tyr Trp Pro Leu Phe Val Leu Ile Phe His Ala Ile Ser Pro Ile Pro
320           35           40           45
323 His Phe Ile Ala Lys Arg Val Thr Tyr Asp Ser Asp Ala Thr Ser Ser
324           50           55           60
327 Ala Cys Arg Glu Leu Ala Tyr Phe Phe Thr Thr Gly Ile Val Val Ser
328 65           70           75           80
331 Ala Phe Gly Phe Pro Val Ile Leu Ala Arg Val Ala Val Ile Lys Trp
332           85           90           95
335 Gly Ala Cys Gly Leu Val Leu Ala Gly Asn Ala Val Ile Phe Leu Thr
336           100          105          110
339 Ile Gln Gly Phe Phe Leu Ile Phe Gly Arg Gly Asp Asp Phe Ser Trp
340           115          120          125
343 Glu Gln Trp Ile Pro Gly Asp Pro Pro Ala Arg Ala Thr Met Thr Ser
344           130          135          140
347 Lys Val Tyr Asp Pro Glu Gln Arg Lys Arg Met Ile Thr Gly Pro Gln
348 145          150          155          160
351 Trp Trp Ala Arg Cys Lys Gln Met Asn Val Leu Asp Ser Phe Ile Asn
352           165          170          175
355 Tyr Tyr Asp Ser Glu Lys His Ala Glu Asn Ala Val Ile Phe Leu His
356           180          185          190
359 Gly Asn Ala Ala Ser Ser Tyr Leu Trp Arg His Val Val Pro His Ile
360           195          200          205
363 Glu Pro Val Ala Arg Cys Ile Ile Pro Asp Leu Ile Gly Met Gly Lys
364           210          215          220
367 Ser Gly Lys Ser Gly Asn Gly Ser Tyr Arg Leu Leu Asp His Tyr Lys
368 225          230          235          240
371 Tyr Leu Thr Ala Trp Phe Glu Leu Leu Asn Leu Pro Lys Lys Ile Ile

```

RAW SEQUENCE LISTING ERROR SUMMARY      DATE: 05/25/2006  
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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:51; Xaa Pos. 11,12,13,14,18,24,28,44,47,54,55,58,64,65,75,76,87,91,103  
Seq#:51; Xaa Pos. 106,108,110,112,115,120,127,128,134,142,143,150

Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete,  
per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:51

VERIFICATION SUMMARY

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L:3648 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:51 after pos.:0

M:341 Repeated in SeqNo=51